

The Amazing Study of Brain Disorders and How they Affect Attitudes and Behaviors

| | Why are we here today? Office of the Chief Medical Examiner Deaths by Suicide 2001-10/21/2005 Cherokee, Graham, Swain, Clay, Macon, Jackson & Haywood Counties | | | | | |
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Some Statistics

From National Institute of Mental Health

- Mental Disorders are common in the United States and internationally. An estimated 26.2 percent of Americans ages 18 and older, about 1 in 4 adults, suffer from a diagnosable mental disorder in a given year
- Mental disorders are the leading cause of disability in the U.S. and Canada for ages 15-44.
- The Global Burden of Disease study conducted by the World Health Organization, the World Bank, and Harvard University, reveal that mental illness, including suicide, accounts for over 15 percent of the burden of disease in established market economies, such as the U.S. This is more than the disease burden caused by all cancers.

Mental Disorders

When we think about Mental Illness in the mental health field we are typically referring to three different groups of disorders.

- Mentally ill (Mood disorders, Psychotic Disorders, Personality Disorders, etc)
- Substance Abuse (Drug and Alcohol Disorders)
- Developmental Disorders (Cognitive Disorders)

Mood Disorders

- Major Depressive Disorder
- Bipolar Disorder
- Dysthymia



Risk or Protective Factor

- Biological
- Psychological
- Social
- Spiritual

It's a problem, only if it's a problem

- A maladaptive pattern that leads to clinically significant impairment or distress
- Social/occupational dysfunction- one or more major areas of functioning such as work, interpersonal relationships, or self-care are markedly below the level achieved prior to the onset

Main Symptoms or Concerns of Depressive Episodes DSM-IV-TR

- Symptoms have been present for at least 2 weeks
- Feels sad/empty
- Tearful
- Irritable
- Life is not pleasurable
- · Weight loss or gain
- Can't sleep or sleeps too much
- Fatigue or loss of energy
- Worthlessness
- · Can't think or concentrate
- · Recurrent thoughts of death



Bipolar Disorder



- Highs and the lows
- Depressive Episodes
- Manic Episodes
 - A distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week

Main Symptoms or Concerns of Manic Episodes DSM-IV-TR

- Inflated self-esteem or grandiosity
- Decreased need for sleep
- More talkative
- Flight of ideas
- Distractibility
- Increase in goal-directed activity
- Excessive involvement in pleasurable activities



Dysthymia

- A chronic disorder characterized by a presence of a depressed mood that lasts most of the day and is present almost continuously
- Symptoms have been present for at least 2 years

Anxiety Disorders

- Panic Disorder and Agoraphobia
- Specific Phobia and Social Phobia
- Obsessive-Compulsive Disorders
- Posttraumatic Stress Disorder
- Generalized Anxiety Disorder



Anxiety Disorders

ANXIETY is a thin stream of fear trickling through the mind. If encouraged, it cuts a channel into which all other thoughts are drained. Afthur Somers Roche

- Are among the most prevalent psychiatric conditions in the US
- Sigmund Freud coined the term Anxiety Neurosishe believed it was caused by a dammed-up libido
- Still don't know exactly what causes these disorders but more and more research is linking anxiety to a misfiring of the brain. The brain is erroneously sending a message to the individual that they are dying and need to do something quick

Panic Disorder



- Characterized by panic attacks
 - Chest pain
 - Heart palpitations
 - Shortness of breath
 - Dizziness
 - Abdominal discomfort
 - Fear of dying
- First diagnosis is typically in the ED, after an extensive battery of tests to rule out a heart condition
- Chronic fear of having another attack, especially in a public place

Obsessive-Compulsive Disorder

- A system of recurrent obsessions or compulsions sufficiently severe to cause marked distress to the person
- Obsession- a mental event. Recurrent and intrusive thought, feeling, idea, or sensation
- Compulsion- a behavior. A conscious, standardized, recurrent behavior



Post-Traumatic Stress Disorder

- A syndrome that develops after a person sees, is involved in, or hears of an extreme traumatic stressor
- Men and women have typically differed in the types of traumas to which they are exposed and their liability to develop PTSD.

Signs and Symptoms of PTSD

- The person has been exposed to a traumatic event
 - The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury
 - The person's response involved intense fear, helplessness or horror

PTSD cont.

- Recurrent and intrusive distressing recollections of the event
- Distressing recurrent dreams of the event
- Acting or feeling as if the traumatic event were recurring
- Intense psychological distress at exposure to items that symbolized the event
- Avoidance of stimuli associated with the trauma
- Persistent symptoms of increased arousal

Psychotic Disorders

- Schizophrenia
- Schizoaffective Disorder
- Delusional Disorder



Schizophrenia

- Affects approximately 1 % of the population (that means 1 in 100 persons will develop schizophrenia during their lifetime)
- Usually begins before age 25, (may be later for women with onset by age 35)

Characteristic symptoms of Schizophrenia

DSM-IV-TR

- <u>Delusions</u>- false belief, based on incorrect inference about external reality, not consistent with patient's intelligence and cultural background which cannot be corrected by reasoning
- <u>Hallucinations</u>-false sensory perception not associated with real external stimuli; there may or may not be a delusional interpretation of the hallucinatory experience
 - <u>Command Hallucinations</u>- false perception of orders that a person may feel obliged to obey or unable to resist
- Disorganized speech
- Disorganized or catatonic behavior
- Negative symptoms

Schizophrenia

- Patients with schizophrenia more frequently attempt suicide, not in relation to active psychotic processes but in relation to devastating demoralization and depression, resulting from years of pain and frustration
- Many medication issues

Substance-Related Disorders

- Alcohol-Related Disorders
- Amphetamine Related Disorders
- Caffeine-Related Disorders
- Cannabis-Related Disorders
- Cocaine-Related Disorders
- Hallucinogen-Related Disorders
- Inhalant-Related Disorders
- Nicotine-Related Disorders
- Opioid- Related Disorders
- Phencyclidine Related Disorders
- Sedative-, Hypnotic-, or Anxiolytic- Related Disorders
- Anabolic Steroid Abuse
- Other Substance-Related Disorders



ADDICTION IS A BRAIN DISORDER Major Internal Parts of the Human Brain Cingulate Sulcus Corpus Caliosum Diencephalon Diencephalon Temporal Lobe Midbrain Pons Medulia Cerebellum 92001 HowStuffWorks

Substance-Related Disorders

- 40% individuals report using one or more illicit substances in their lifetimes
- 15 % have used illicit substance in the past year
- Substance abuse is a major precipitating factor for suicide
- Persons who abuse substance are about 20 times more likely to die by suicide than the general population

Alcohol Intoxication

DSM-IV-TR

- Clinically significant maladaptive behavioral or psychological changes that developed during, or shortly after, alcohol ingestion
- And one or more of the following
 - Slurred speech
 - Unsteady gait
 - Nystagmus
 - Impairment in attention or memory
 - Stupor or coma



Alcohol Withdrawal TR

DSM-IV-

- Cessation of (or reduction in) alcohol use that has been heavy and prolonged
- Two or more of the following developing within several hours to a few days after cessation of use
 - Autonomic hyperactivity (eg sweating or pulse rate greater than 100)
 - Increased hand tremor
 - Insomnia
 - Nausea or vomiting
 - Transient visual, tactile, or auditory hallucinations or illusions
 - Psychomotor agitation
 - Anxiety
 - Grand mal seizures

Other bits of information

- Try to get as much information regarding the substance use from the petitioner as possible
 - What are they using
 - How often are they using
 - How much are they using
 - When was the last time they used
- Alcohol and Benzodiazepines can be life threatening in withdrawal
- Opiates feel life threatening
- Drug screens will not show if an individual has use a hallucinogen or other designer or OTC drug (ecstasy, Computer duster, Triple C, etc)
- Psychosis can be common in methamphetamine use
- No programs for adults for long term involuntary substance abuse treatment, this level of treatment must be voluntary
- Encourage family members to call your local LME

Treatment Works

- Studies show that substance use disorder treatment cuts drug use in half, reduces criminal activity up to 80 percent, and reduces arrests up to 64 percent.
- For every \$1 invested in treatment, there is a return of between \$4 and \$7 in reduced drug-related crime and criminal justice costs. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1

Other Disorders

- Eating Disorder
- Personality Disorders
- Postpartum Depression/Psychosis
- Dissociative Disorders



Eating Disorders

DSM-IV-TR

- Anorexia Nervosa
 - Refusal to maintain body weight at or above a minimally normal weight for age and weight
 - Intense fear of gaining weight or becoming fat, even though underweight
 - Disturbance in the way in which one's body weight or shape is experienced
 - The absence of at least three consecutive menstrual cycles
- Bulimia Nervosa
 - Eating, in a discrete period of time (ex within a 2 hr period), an amount of food that is larger than most people would eat during a similar period of time and under similar circumstances
 - A sense of lack of control over eating during the episode
 - Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise
 - Occurs twice a week for 3 months
 - Self-evaluation is unduly influenced by body shape and weight

Personality Disorders



- An enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two (or more) of the following areas
 - Cognition (i.e., ways of perceiving and interpreting self, other people, and
 - Affectivity (i.e., the range, intensity, lability and appropriateness of emotional response)
 - Interpersonal functioning
- The enduring pattern is inflexible and pervasive across a broad range of personal and social situation
- The enduring pattern leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning
- The pattern is stable and of long duration, and its onset can be traced back at least to adolescence or early adulthood

Borderline Personality Disorder



- Frantic efforts to avoid real or imagined abandonment
- Pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation
- Identity disturbance
- Impulsivity
- Recurrent suicidal behavior, gestures, or threats, or self mutilating behavior
- Affective instability due to a marked reactivity of mood
- Chronic feelings of emptiness
- Inappropriate, intense anger or difficulty controlling anger
- Transient, stress-related paranoid ideation or severe Dissociative symptoms

Postpartum Depression & Psychosis



- A specific disorder that occurs in women who have recently delivered a baby.
- Characterized by the mother's depression, delusions, and thoughts of harming either her infant or herself
- Symptoms often begin within days of the delivery but can be within 8 weeks post delivery
- Early symptoms include fatigue, insomnia, restlessness and emotional lability
- Later symptoms include suspiciousness, confusion, incoherence, irrational statements and obsessive concerns about the baby's health and welfare
- Delusions are present in 50 % of patients and hallucinations in about 25%

Mental Retardation

- Significantly sub average general intellectual functioning resulting in, or associated with, concurrent impairment in adaptive behavior and manifested during the developmental period, before the age of 18.
- Degree of retardation can be from Mild, Moderate, Severe to Profound

Disorders related to a General Medical Condition

- Delirium
- Dementia
- Amnestic Disorder
- Mental Disorders Due to a General Medical Condition

Delirium

- A syndrome, not a disease
- A disturbance of consciousness and a change in cognition that develop over a short period of time
- Classically delirium has a sudden onset (hours or days), a brief and fluctuating course, and rapid improvement when the causative factor is identified and eliminated

Dementia



- The development of multiple cognitive deficits
 - Memory impairment <u>and</u> (one or more of the following)
 - Aphasia (language disturbance
 - Apraxia (impaired ability to carry out motor activities)
 - Agnosia (failure to recognize or identify objects)
 - Disturbance in executive functioning

Stigma of Mental Illness

- There is really no clear distinction between what is normal behavior and what is mentally ill behavior
- Portrayal of mental illness in Hollywood
- Deinstitutionalization

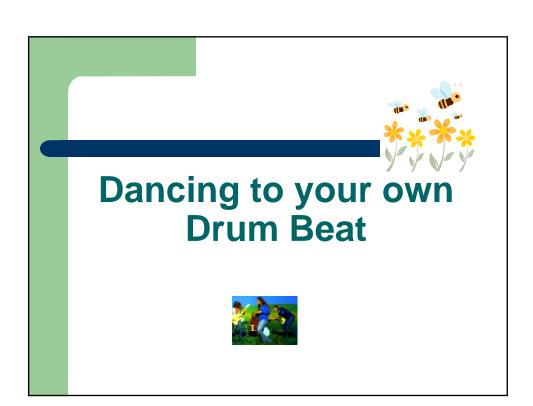
Reducing Stigma

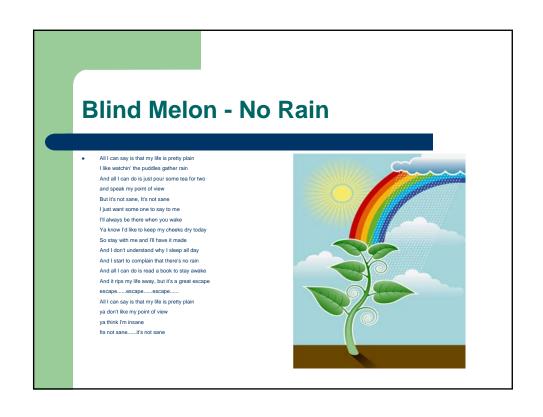
- Stigma was expected to abate with increased knowledge of mental illness, but just the opposite occurred: stigma in some ways intensified over the past 40 years even though understanding improved.
- One way to eliminate stigma is to find causes and effective treatments for mental disorders
- When people understand that mental disorders are not the result of moral failings or limited will power, but are legitimate illnesses that are responsive to specific treatments, much of the negative stereotyping may dissipate

Surgeon General's Report on Mental Health

What does it mean to be mentally healthy?

- Sound in body, mind and spirit
- Free from mental disease
- Resiliency
- Ability to have positive meaningful relationships
- Ability to live life with a full range of emotions
- To make choices that promote growth and well being







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